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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,541	12/28/2005	Francesco Pessolano	NL030781	3960

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EXAMINER	
DUNN, DARRIN D	
ART UNIT	PAPER NUMBER
2121	
MAIL DATE	DELIVERY MODE
08/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/562,541	PESSOLANO ET AL.	
	Examiner	Art Unit	
	Darrin Dunn	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06/06/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/28/2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is responsive to the amendment filed on 06/06/2007. Claims 1-11 remain pending. Examiner acknowledges applicant's addition of claim 11. Applicant's amendments to the aforementioned claims have been considered; however, the amendments do not place the claims in a condition for allowance. In effect, this action has been made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 3-5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylliassen (USPN 2002/0135474) in view of Kahler et al. (USPN 6697941).

5. As per claim 1, Sylliassen teaches a method of controlling an electronic device ([ABSTRACT], [FIG. 1], [0024]) comprising the steps of:

detecting a state of a user ([FIG 4A] e.g., detecting motion)

determining whether, based on this state, the user is asleep ([0059] e.g., if motion falls below a threshold then system infers user is asleep);

However, Sylliassen does not disclose switching (5) the electronic device to a hibernation mode of reduced power consumption when it has been determined that the user is asleep. Kahler et al. teaches that a computer system goes into a "reduced power consumption' sleep mode, i.e., hibernation mode ([COL 5 lines 1-2])

Therefore, at the time the invention was made, one of ordinary skill in the art would have motivation to modify Sylliassen to include a hibernation mode as taught by Kahler et al. to reduce power. Sylliassen expressly states "when a consumer device is not being used...the device continues to use power despite not being used." [0003 lines 8-11] In effect, when the device "is not being used, it continues to consume power that must be paid for." [0004 lines 9-11]). Kahler et al. provides for implementing a 'reduced power consumption' sleep mode. Since a sleep mode function is a well known means to reduce power consumption, it would have been obvious to one of ordinary skill in the art to have utilized a hibernation/sleep mode as to conserve energy.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylliassen USPN 2002/0135474 in view of Kahler et al. (USPN 6697941) and in further view of Lidow et al. USPN 4228806.

7. As per claim 2, Sylliassen teaches an electronic device which detects the state of a user ([ABSTRACT]). However, Sylliassen, as modified, does not teach an electronic device that expressly measures the user's brainwaves to determine the state of the user. Lidow et al. teaches

a system for discriminating the sleep state of a body by measuring brain wave activity i.e., brainwaves ([ABSTRACT], [Col. 1, lines 5-9], [Col. 2, lines 12-15]).

At the time the invention was made, one of ordinary skill in the art would have motivation to modify Sylliassen to include an additional sensor as taught by Lidow et al. to monitor the brainwave of a sleeping subject. Sylliassen and Lidow et al. provide a means to control an electronic device (Lidow et al. inhibits the operation of an alarm, i.e., controlling an electronic device). In addition, Lidow et al. expressly provides an additional way to monitor the state of a subject, i.e., detecting brainwaves to verify the sleep state of a subject using a sensor. Sylliassen is concerned with solving the problem of detecting the state of the user, particularly the sleep state of a user, and Sylliassen expressly discloses motivation to utilize additional sensors to monitor the state of a subject, see [0023]. Lidow et al. provides an additional means to detect the state of a sleeping user to control an electronic device, and one or ordinary skill in the art could readily adapt Sylliassen in view of Lidow et al. to include sensors to monitor the brainwave of a user to determine a corresponding sleep state.

8. As per claim 3, Sylliassen, as modified, teaches a method as claimed in claim 1, characterized in that the step of detecting (1) a state of a user comprises detecting his movement ([0059])

9. As per claim 4, Sylliassen, as modified, teaches a method as claimed in claim 3, characterized in that the step of determining (3) whether the user is asleep comprises determining (3) whether his movement has been detected for a predetermined period of time ([FIG 4A], [0059])

10. As per claim 5, Sylliassen as modified, teaches the hibernation mode, i.e., sleep mode. However, Sylliaseen, as modified, does not state that the hibernation mode includes reducing an image size output by the electronic device. However, Kahler et al. teaches the implementation of – screensaver mode or that the screen is blanked ([COL 4 lines 63-65] e.g., it is interpreted that a screen saver/ blank screen reduces the image size output by the electronic device).

Therefore, at the time the invention was made one of ordinary would have motivation to utilize a screen saver/ blank screen as part of a hibernation mode. It is well known that screen savers function to reduce power consumption, and it is common to utilize a screen saver as part of the sleep/hibernation mode. Since it is taught that image deterioration may be selected as part of the power saving mode, it would have been obvious to have included this feature as part as any power saving mode, in particular a hibernation mode.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylliassen (USPN 2002/0135474) in view of Kahler et al. (USPN 6697941) and in further view of Abe et al. (USPN 20040155875).

12. As per claim 6, Sylliassen, as modified, teaches a hibernation mode; however, it is not disclosed that a hibernation mode includes reducing quality of an image output by the electronic device. Abe et al. teaches selecting a power saving mode which suffers some deterioration, i.e., reduced image quality ([0203 lines 3-4]).

Therefore, at the time the invention was made, one of ordinary skill in the art would have motivation to include as a power saving mode a degree of image deterioration. Sleep modes are well known in the art as part of power conservation. Since image deterioration is taught as a

function of power saving, it would have been obvious to have implemented lower image quality as a means to conserve power.

13. As per claim 7, Sylliassen, as modified, teaches a computer program enabling a programmable device to carry out a method as claimed in claim 1 ([0023]).

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylliassen (USPN 2002/0135474) in view of Kahler et al. (USPN 6697941).

15. As per claim 8, Sylliassen, as modified, teaches an electronic device (21) ([ABSTRACT], [0024]), comprising:

a receiver (23) for receiving ([0023], [0045] e.g., data bus coupled to sensors), from a detector (25) ([0026]) a detection signal (inherent to detector) comprising a state of a user ([0045] e.g., motion); and

a control unit (27) which is able to use the receiver (23) to receive the detection signal from the detector (25) determine whether, based on his state, the user is asleep, and switch the electronic device (21) to a mode of reduced power consumption when it has been determined that the user is asleep ([FIG 6], [0045], [0052], [0059] e.g., processor interpreted as a control for receiving input from sensor indicative of the state of user. The processor determines the state of the user and generates a shutdown signal based on the state, i.e. movement, see FIG 4A-B. In turn, the shutdown signal is sent to AND/OR circuit for effectuating the shutdown of the electronic device)

However, Sylliassen does not disclose switching the electronic device to a hibernation mode of reduced power consumption when it has been determined that the user is asleep. Kahler

et al. teaches that a computer system goes into a "reduced power consumption' sleep mode, i.e., hibernation mode ([COL 5 lines 1-2])

Therefore, at the time the invention was made, one of ordinary skill in the art would have motivation to modify Sylliassen to include a hibernation mode as taught by Kahler et al. to reduce power. Sylliassen expressly states "when a consumer device is not being used...the device continues to use power despite not being used." [0003 lines 8-11] In effect, when the device "is not being used, it continues to consume power that must be paid for." [0004 lines 9-11]). Kahler et al. provides for implementing a 'reduced power consumption' sleep mode. Since a sleep mode function is a well known means to reduce power consumption, it would have been obvious to one of ordinary skill in the art to have utilized a hibernation/sleep mode.

16. As per claim 9, Sylliassen, as modified, teaches an electronic device ([ABSTRACT], [0024]) as claimed in claim 8, characterized in that it further comprises:

An output means which is able to generate an output signal ([FIG 1], [FIG 4A-B], [FIG 5A-B], [0048] e.g., flow chart depicts generation of an output signal, i.e., shutdown signal.).

Sylliassen does not disclose he control unit is able to reduce an image size of the display signal based on the state of the user. Sylliaseen, as modified, does not state that the image size of the display is reduced based on the state of the user. Kahler et al. teaches the implementation of – screensaver mode or that the screen is blanked ([COL 4 lines 63-65] e.g., it is interpreted that a screen saver/ blank screen reduces the image size output by the electronic device).

Therefore, at the time the invention was made one of ordinary would have motivation to utilize a screen saver/ blank screen as part of a hibernation mode. It is well known that screen savers function to reduce power consumption, and it is common to utilize a screen saver as part

of the sleep/hibernation mode. Since it is taught that image deterioration may be selected as part of the power saving mode, it would have been obvious to have included this feature as part as any power saving mode, in particular a hibernation mode.

17. As per claim 10, Sylliassen teaches an electronic device (21) ([ABSTRACT], [0024]) as claimed in claim 8, characterized in that it further comprises a motion detector ([0023])

18. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylliassen (USPN 2002/0135474) in view of Kahler et al. (USPN 6697941), and in further view of view of Abe et al. (USPN 20040155875).

19. As per claim 11, Sylliassen, as modified, teaches the limitations of claim 11 with the exception it does not teach that the control unit reduces an image quality of the display signal on the basis of the state of the user. Abe et al. teaches selecting a power saving mode which suffers some deterioration, i.e. image quality ([0203 lines 3-4]).

Therefore, at the time the invention was made, one of ordinary skill in the art would have motivation to include as a power saving mode a degree of image deterioration. Sleep modes are well known in the art as part of power conservation. . Since image deterioration is taught as a function of power saving, it would have been obvious to have implemented lower image quality as a means to conserve power, as taught by Abe et al.

Response to Arguments

20. Applicant's arguments with respect to claim 06/06/2007 have been considered but are moot in view of the new ground(s) of rejection.

It is acknowledged that a clean version of Figure 4 will be submitted.

- The objection to Figure[s] 1-3 is removed. However, the objection to Figure 4 will be removed conditioned upon receipt of a clean version.
- The objection to the lack of section headings is removed.
- The 35 U.S.C 101 rejection is removed based on the amendment that functions to interrelate the medium and computer program.
- The 35 U.S.C 112 rejection is removed with respect to claims 5-6.
- With regard to the amendment to claims, a new ground of rejection has been established, *supra* 103 claims rejections.

Response to Amendment

21. The reply filed on 06/06/2007 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): Claim 2 was rejected under 35 USC 103 as being anticipated by Sylliassen US 2002/0135474 over Lidow et al. Us 4228806. Applicant's remarks do not address the rejection of the claim limitations. See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darrin Dunn whose telephone number is (571) 270-1645. The examiner can normally be reached on EST:M-R(8:00-5:00) 9/5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD
08/10/2007

Anthony Knight
Supervisory Patent Examiner
Art Unit 2121